Operating Permits: Beyond the Forms

Tips and Tricks to Streamline Operating Permit Applications

By: Nicole Weidenbenner, PE
Tips and Tricks Topics

- Incorporate by reference
- Flow diagrams
- Insignificant Activities
- Potential to Emit Calculations
- Submitting complex information
Incorporate by reference:
Available when renewing the same permit type, Part 70 and Intermediates only

Ineffective way:
We would like to incorporate by reference our existing Part 70 Operating Permit.

Effective way:
We would like to incorporate by reference our existing Part 70 Operating Permit with the following changes that are included in this application:

- Units that are subject to new rules (MACT 4Z, 6J, 6.261)
- Units that have been removed/installed/modified since previous Operating Permit
Flow Diagrams

Ineffective:

Coal receiving and coal mill

Kiln

Shipping

Effective:

Coal receiving by dump truck onto open storage pile (EP 1)

3 Conveyors in series (EP2,3,4) to transfer coal to coal mill

Coal mill (EP5)
Insignificant Activities:
Activities for which there is no applicable regulation

<table>
<thead>
<tr>
<th>Activity</th>
<th>Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Boiler</td>
<td>&lt;15</td>
</tr>
<tr>
<td>Screening Plant</td>
<td>N/A</td>
</tr>
<tr>
<td>Gasoline Tank</td>
<td></td>
</tr>
<tr>
<td>Burn Pit with ACD</td>
<td></td>
</tr>
<tr>
<td>Tire shredder</td>
<td>None</td>
</tr>
<tr>
<td>Diesel tanks</td>
<td></td>
</tr>
<tr>
<td>Space Heaters</td>
<td></td>
</tr>
</tbody>
</table>

Ineffective ways:

- Both Part 70 and Intermediates should include all activities.
- There are very few activities that actually qualify as insignificant.
- Present the information in spreadsheets, with detailed explanations, source citations, etc.
Insignificant Activities:
Detailed activity explanations are crucial

Small boiler
• What is small? Fuel type(s), Year, MHDR?

Screening Plant
• Is this a single screen? What type? Materials, Year, MHDR?

Tire shredder
• Is this a tire cutter that slices a tire into five parts or does it shred tires into tiny pieces?

Space Heaters
• How many? Fuel type or electric? Year? MHDR?
### Insignificant Activities:

Are they really insignificant?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Insignificant Activity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Boiler</td>
<td>No. 6.220 applies, plantwide limits, other rules</td>
</tr>
<tr>
<td>Screening Plant</td>
<td>Maybe, case specific. Look at Subpart OOO, 6.220, 6.400, 6.060, and plantwide limits</td>
</tr>
<tr>
<td>Gasoline Tank</td>
<td>No. MACT Subpart 6C applies, plantwide VOC/HAP limitations</td>
</tr>
<tr>
<td>Burn Pit with ACD</td>
<td>The burn pit itself is insignificant (need open burning permit to use it). The ACD requires a Part 70 (OSWI)</td>
</tr>
<tr>
<td>Tire shredder</td>
<td>Maybe, case specific. Look at 6.220, 6.060, 6.400</td>
</tr>
<tr>
<td>Diesel tanks</td>
<td>Maybe, case specific. Plantwide VOC/HAP limit, 5.500</td>
</tr>
<tr>
<td>Space Heaters</td>
<td>No. 6.220 applies to all, plantwide limits, other rules</td>
</tr>
</tbody>
</table>
Insignificant Activities:
Detailed emissions explanations are critical, especially for rule exemptions

Tire shredder (cuts tires into 5 slices per tire)
MHDR=0.02 ton tires/hour
(Source: 40 tires/day, 25 lbs/tire, 24 hours/day)
Emission factor=0.57 lb PM/ton tires
(Source: FIRE 6.21, no recent factor available)
PTE=(0.02*0.57)=0.01 lb PM/hr

Less than 0.5 lb/hr, meets exemption 6.400(1)(B)12.
Potential to Emit

Ineffective:

• Not including all emission points at the installation
• Providing vague values <15
• Not providing justification or citations for emission factors or derived MHDR
• Using performance testing results without providing documentation

Effective:

• The opposite of the left
• Named sources and fugitives
• Emergency generators may use 500 hours per year, all else uses 8760
• Submit a hardcopy with application, send spreadsheet to permit writer during review process
• Capture and control efficiencies for control devices
Photo credit:
Complex Information

1. Multiple types of the same unit
   • 20 diesel fired space heaters

2. Changing emission point numbers

3. Alternate operating scenarios
   • Multiple fuel or paint types

4. Complex regulatory applicability
   • Engines
40 CFR part 63 Subpart ZZZZ

Ineffective:
• EP-02 is subject to MACT 4Z

Effective:
• EP-02 is a diesel fired, non-emergency, 350 hp, CI, with displacement less than 30 L/cylinder, at an area source of HAPs, that was installed in January 2006 and is subject to 4Z as follows:
  – Existing unit, see 63.6590(a)(1)(iii)
  – Fuel requirements in 63.6604(a) and (b)
Summary

The Operating Permit forms are a tool, not a restriction.
Questions?
Division of Environmental Quality Director: Leanne Tippett Mosby

Date: 03/04/2016

Nothing in this document may be used to implement any enforcement action or levy any penalty unless promulgated by rule under chapter 536 or authorized by statute.